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# NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

11/06/2008

George A. Loud, Esquire BACON & THOMAS Fourth Floor 625 Slaters Lane Alexandria, VA 22314-1176 EXAMINER

NGUYEN, KHANH TUAN

ART UNIT PAPER NUMBER

1796

DATE MAILED: 11/06/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509.752	09/30/2004	Norifumi Hasegawa	KON-C483	8308

TITLE OF INVENTION: MIXED CONDUCTOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/06/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

appropriate. All further	correspondence includired below or directed oth	ng the Patent, advance of	rders and notification of n a) specifying a new corres	naintenance fees wi	ll be mai	iled to the current of	orrespondence address as
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  7590 11/06/2008  George A. Loud, Esquire BACON & THOMAS Fourth Floor				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
				Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.			
625 Slaters Lane Alexandria, VA							(Depositor's name)
,							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNI	EY DOCKET NO.	CONFIRMATION NO.
10/509,752 TITLE OF INVENTION	09/30/2004 : MIXED CONDUCTOI	R	Norifumi Hasegawa		KO	ON-C483	8308
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nonprovisional	NO	\$1510	\$300	\$0	<u>'</u>	\$1810	02/06/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
NGUYEN, KI	HANH TUAN	1796	252-500000	l			
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address' 12 or more recent) attach	or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent attolisted, no name will be THE PATENT (print or type)	s of up to 3 registered patent attorneys alternatively, of a single firm (having as a member a corney or agent) and the names of up to coatent attorneys or agents. If no name is ne will be printed.				
recordation as set forti (A) NAME OF ASSIC	h in 37 CFR 3.11. Comp GNEE	oletion of this form is NO	T a substitute for filing an : (B) RESIDENCE: (CITY	assignment. and STATE OR CO	DUNTRY	7)	np entity 🖵 Government
Advance Order - #	To small entity discount p	b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
	s SMALL ENTITY statude of Publication Fee (if require)	us. See 37 CFR 1.27.	b. Applicant is no long				
				Date			
Authorized Signature  Typed or printed name							
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10/509,752	09/30/2004	Norifumi Hasegawa	KON-C483	8308	
75	590 11/06/2008	EXAMINER			
George A. Loud, Esquire			NGUYEN, KHANH TUAN		
BACON & THOMAS			ART UNIT	PAPER NUMBER	
Fourth Floor			1796		
625 Slaters Lane Alexandria, VA 22314-1176			DATE MAILED: 11/06/2008		

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 244 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 244 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)				
	10/509,752	HASEGAWA, NORIF	-UMI			
Notice of Allowability	Examiner	Art Unit				
	KHANH T. NGUYEN	1796				
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this apportant or other appropriate communication GHTS. This application is subject to	plication. If not include will be mailed in due o	ed course. <b>THIS</b>			
1. This communication is responsive to <u>07/17/2008</u> .						
2. ☑ The allowed claim(s) is/are <u>1-3,5-24,26 and 27</u> .						
<ul> <li>3. Acknowledgment is made of a claim for foreign priority unanalysis.</li> <li>a) All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> <li>3. ☐ Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	been received. been received in Application No		ion from the			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the req	uirements			
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>			OTICE OF			
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	et be submitted.					
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached						
1)  hereto or 2)  to Paper No./Mail Date						
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date						
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t			back) of			
6. DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT			lote the			
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 7. ☑ Examiner's Amendr 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), te ment/Comment	wance			

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## **DETAILED ACTION**

#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

- 2. The application has been amended as follows:
  - 2.1 Claim 12 have been amended as follows:

--Claim 12. (Currently Amended) A method of producing a mixed conductor in the form of a single material comprising:

a first step of obtaining a high molecular weight precursor by mixing and polymerizing at least one member selected from the group consisting of aliphatic hydrocarbon, aromatic hydrocarbon and derivatives thereof with a proton conducting material; and

a second step of burning the high molecular weight precursor, obtained in the first step, in an inert atmosphere.--

2.2 Claim 13 have been amended as follows:

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--Claim 13. (Currently Amended) A method of producing a mixed conductor in the form of a single material comprising:

a first step of polymerizing at least one member selected from the group consisting of aliphatic hydrocarbons, aromatic hydrocarbons and derivatives thereof;

a second step of mixing a proton conducting material with the polymerized member to obtain a high molecular weight precursor; and

a third step of burning the high molecular weight precursor obtained in the first step in an inert atmosphere to convert the polymerized member to electron conducting portions.—

#### 2.3 Claim 14 have been amended as follows:

--14. (Currently Amended) A mixed conductor in the form of a single material producing method wherein an organic compound is bound or mixed with a compound having proton conduction to obtain a high polymer precursor, and said high polymer precursor is carbonized to thereby impart electron conduction to the precursor.--

#### Examiner's Statement of Reason for Allowance

3. Claims 1-3, 5-24, 26, and 27 are allowed over the prior art of record.

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4. The following is an examiner's statement of reasons for allowance:

The claims, filed on 07/17/2008 have been carefully reviewed and searched. Consequently, the reasons for allowance of claims 1-3, 5-24, 26 and 27 are set forth in according to Applicant's remarks, filed on 07/17/2008, on pages 7-8.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571)272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KTN/ 10/28/2008

/DOUGLAS MC GINTY/ Primary Examiner, Art Unit 1796